

the egg, and that in which he has found it, immediately before it changes to a nymph. He did not however describe them as actually the young of *Meloë*, and he now finds that they belong to another family, the *Engidæ*.

The author then describes these larvæ more minutely, and states that having kept them in a glass vessel partly filled with dry clay and a cell of *Anthophora retusa* which contained a nymph, he found that the larvæ constantly sheltered themselves beneath it, although they did not attempt to prey on it, but fed on the rejectamenta voided before it underwent its change. The larvæ continued in this state till the beginning of January, when each specimen quitted the cell of the bee, and excavated for itself a burrow in the clay in which it assumed the nymph state. The nymph closely resembled that of *Diaperis Boleti* in its general appearance.

At the end of February each specimen assumed the imago state, but continued feeble, and remained in its burrow until the eighth of March, when it came forth and proved to be *Cryptophagus cellaris*, Payk.

#### ZOOLOGICAL SOCIETY.

March 23, 1847.—Wm. Yarrell, Esq., Vice-President, in the Chair.

ON EIGHT NEW SPECIES OF AUSTRALIAN BIRDS; AND ON ANTHUS MINIMUS, VIG. AND HORSF., AS THE TYPE OF A NEW GENUS CHTHONICOLA, GOULD. BY JOHN GOULD, F.R.S.

ARTAMUS ALBIVENTRIS. *Art. loris, spatio infra oculum, et mento, atris; capite, collo, et dorso superiore, fusco-griseis; pectore et abdomine pallide griseis, colore griseo in tectricibus caudæ inferioribus albo mergente; tectricibus caudæ superioribus, caudæque, nigris; tertid parte apicali rectricum omnium, intermediis duabus exceptis, albd.*

Lores, space beneath the eye and the chin deep black; head, neck and upper part of the back brownish grey; lower part of the back and the wings dark grey, becoming gradually deeper towards the tips of the feathers; primaries and secondaries narrowly edged with white at the tip; under surface of the wing white; ear-coverts, chest, and abdomen pale grey, passing into white on the under tail-coverts; upper tail-coverts and tail black; the apical third of all but the two middle feathers white; irides dark brown; bill yellowish horn-colour, becoming black at the tip; feet blackish brown.

Total length, 7 inches; bill,  $\frac{7}{8}$ ; wing,  $4\frac{1}{8}$ ; tail,  $2\frac{3}{4}$ ; tarsi,  $\frac{3}{4}$ .

Hab. Darling Downs, New South Wales, &c.

Remark.—This species differs from the *A. cinereus*, to which it is most nearly allied, in the white colouring of the abdomen and under tail-coverts. Two specimens have come under my notice, both of which were killed by Mr. Gilbert, one on the Darling Downs, in New South Wales, and the other at Peak-range Camp, one of the stations so named by Dr. Leichardt during his expedition from Moreton Bay to Port Essington.

**ACANTHIZA APICALIS.** *Acan. plumis in fronte cervinis, fusco marginatis; caudā latā fasciā fusco-nigrā prope apicem transversim ornata, apice ipso albo; tectricibus caudæ superioribus rufo tinctis.*

Feathers of the forehead deep buff, edged with dark brown; all the upper surface, wings and tail light olive-brown; tail crossed near the extremity with a broad and distinct band of brownish black, and largely tipped with white; upper tail-coverts tinged with rufous; throat and chest greyish white, each feather margined with black, giving that part a mottled appearance; flanks, abdomen and under tail-coverts pale buff; irides light red; bill, legs and feet dark brown.

Total length, 4 inches; bill,  $\frac{1}{2}$ ; wing, 2; tail, 2; tarsi,  $\frac{7}{8}$ .

*Hab.* Swan River, Western Australia.

*Remark.*—Distinguished from *A. diemenensis*, *A. pusilla*, and *A. Ewingii*, to all of which it is nearly allied, by its large size, by its larger and rounder tail, by the broad and distinct band of black which crosses the tail-feathers near their extremities, and by their being largely tipped with white.

**CYSTICOLA ISURA.** *Cys. colli lateribus, nuchā, et uropygio pallidè rufis; vertice, dorso, secundariisque, saturatè brunni-nigris, singulis plumis stramineo marginatis, et latā fasciā atrā transversim prope apicem infra ornatis.*

Sides and back of the neck and rump pale rufous; crown of the head, back and secondaries deep brownish black, each feather margined with buff; tail dark brown, margined with buff, and crossed on the under side near the tip with a broad conspicuous band of black; under surface deep buff, becoming paler on the chin and centre of the abdomen; bill brown; feet yellowish brown.

Total length, 4 inches; bill,  $\frac{1}{2}$ ; wing,  $1\frac{3}{4}$ ; tail,  $1\frac{1}{2}$ ; tarsi,  $\frac{3}{4}$ .

*Hab.* Southern coasts of Australia.

*Remark.*—Distinguished from the other members of the genus by the shorter and more truncated form of its tail, which has suggested the specific term assigned to it.

**CHALCITES OSCULANS.** *Chal. capite, corpore superiore, alisque, nittente olivaceo-fuscis, colore eodem in humeris primariisque saturatiore, sed in tectricibus caudæ superioribus albicante; caudā intensè olivaceo-fusca, plumā quāque ad apicem albā; pectore et abdomine pallidè cinnamominis.*

Head, all the upper surface and wings glossy olive-brown, becoming darker on the shoulders and primaries, and fading into white on the upper tail-coverts; tail dark olive-brown, each feather tipped with white, and the lateral one on each side crossed on the inner web with five bars of white; ear-coverts black, encircled with white; under surface of the wing, throat, breast and abdomen pale cinnamon-brown, fading into white on the under tail-coverts; bill brown; feet olive-brown.

Total length,  $7\frac{1}{2}$  inches; bill,  $\frac{7}{8}$ ; wing,  $4\frac{5}{8}$ ; tail,  $3\frac{7}{8}$ ; tarsi,  $\frac{3}{4}$ .

*Hab.* New South Wales.

*Remark.*—I have applied the term of *osculans* to this species, be-

cause in it are united in a remarkable degree the characters of the genera *Cuculus* and *Chalcites*; but as those of the latter genus predominate, I have retained it therein.

*SYNOÏCUS DIEMENENSIS.* *Syn. fronte, loris, et mento griseo-albis, stramineo tinctis; vertice saturatè brunneo, medio lined stramineo notato; omni corpore superiore fasciis irregularibus transversis griseis, nigrisque, castaneisque, vario; mediis plumis lined griseo-albid ornatis.*

Forehead, lores and chin greyish white, tinged with buff; crown of the head dark brown, with a line of buff down the centre; all the upper surface irregularly marked with beautiful transverse bars of grey, black and chestnut, each feather with a fine stripe of greyish white down the centre; primaries brown, mottled on their external edges with greyish brown; all the under surface greyish buff, each feather with numerous regular somewhat arrow-head-shaped marks of black, and many of them with a very fine line of white down the centre; bill blue, deepening into black at the tip; irides orange; feet dull yellow.

Total length,  $8\frac{1}{2}$  inches; bill,  $\frac{3}{4}$ ; wing,  $4\frac{1}{2}$ ; tarsi,  $1\frac{1}{8}$ .

*Hab.* Van Diemen's Land.

*Remark.*—Nearly allied to *S. australis*, but of a much larger size and with the markings of the upper surface more numerous and varied.

*SYNOÏCUS SORDIDUS.* *Syn. saturatè fuscus minutè nigro maculatus; mediis plumis corporis superioris inferiorisque latè fasciâ griseo-cæruleâ longitudinaliter ornatis.*

General plumage dark brown, minutely freckled with black, each feather of the upper and under surface with a broad stripe of bluish grey down the centre; feathers of the head and back of the neck with a spot of blackish brown at the tip, those down the centre of the head and a few of the back feathers with white shafts; chin buff; flank-feathers with an arrow-head-shaped mark of black near the tip.

Total length, 7 inches; bill,  $\frac{5}{8}$ ; wing,  $3\frac{3}{4}$ ; tarsi,  $\frac{7}{8}$ .

*Hab.* South Australia.

*Remark.*—With the exception of *S. sinensis*, this species is the least of the genus yet discovered; it moreover differs from them all in the absence of any varied markings, in lieu of which all the feathers of the upper surface have a broad bluish grey stripe down the middle.

*PORZANA LEUCOPHRYS.* *Por. fasciâ à mandibulâ superioris basi ad angulum oculi posticum ductâ griseo-albâ; maculâ latâ atrâ ab oculo ad rictum extensâ; nuchâ, corpore superiore, caudâque, fusco-nigris; capitis, colli, et pectoris, lateribus griseis; mento, et medio abdomine albis.*

From the base of the upper mandible to the posterior angle of the eye a streak of greyish white; from the eye to the gape a broad patch of deep black; crown of the head brownish black; back of the neck, upper surface and tail brownish black, each feather margined with pale reddish, the latter colour becoming very conspicuous on the wing-coverts and scapularies; wings pale brown; sides of the head,



neck and breast grey; chin and centre of the abdomen white; flanks and under tail-coverts rufous; upper mandible reddish brown; tomia of both mandibles tile-red; legs and feet oil-green, blotched with light ash-colour.

Total length,  $6\frac{1}{2}$  inches; bill, 1; wing,  $3\frac{1}{2}$ ; tail, 2; tarsi,  $1\frac{3}{8}$ .

*Hab.* Port Essington and Northern Australia.

*Remark.*—This bird differs from every other species of the genus inhabiting Australia, in having a superciliary stripe of white, in the black colouring of the lores, and in the olivaceous tint of the plumage.

*PLOTUS NOVÆ-HOLLANDIÆ.* *Plot.* (Mas) *guld figuræ sagittæ cuspidis alba notatâ; latâ fasciâ alba à mandibularum basi quatuor unciiis in colli latera extensâ; scapularibus lanceolatis, lanceolatâ maculâ in medio, et caulibus atris ornatis.*

*Male.*—An arrow-head-shaped mark of white on the throat; a broad stripe of the same colour commences at the base of the mandibles, extends for about four inches down the sides of the neck, and terminates in a point; head, neck and all the upper surface of the body greenish black, stained with brown and with a patch of deep rusty red in the centre of the under side of the throat; under surface deep glossy greenish black; wings and tail shining black; all the coverts with a broad stripe of dull white, occupying nearly the whole of the outer and a part of the inner web, and terminating in a point; scapularies lanceolate in form, with a similar shaped mark of white down the centre, and with black shafts, the scapular nearest the body being nearly as large as the secondaries, and having the outer web crimped and the inner web with a broad stripe of dull white close to the stem; the secondaries nearest the body with a similar white stripe on the outer web, close to the stem; centre tail-feathers strongly and the lateral ones slightly crimped; orbits naked, fleshy, protuberant, and of a yellowish olive, mottled over with brown specks; irides of three colours, the ring nearest the pupil being dull orange-buff; to this succeeds another of marbled buff and brown, and to this an outer one of orange-buff; naked skin at the base of the lower mandible wrinkled and yellow; upper mandible olive, under mandible dull yellow, both becoming brighter at the base; feet yellowish flesh-colour, becoming brown on the upper part of the outer toes.

*Female.*—Upper surface blackish brown, each feather margined with greyish white; under surface buffy white. In other respects similar to the male.

Total length, 36 inches; bill, 4; wing,  $13\frac{1}{2}$ ; tail, 9; tarsi, 2.

*Hab.* The rivers of the whole of the southern coast of Australia.

*Remark.*—Very nearly allied to the *Plotus* inhabiting Java, but distinguished from it by the shortness of the scapularies and by its larger size.

Mr. Gould also exhibited to the Meeting a specimen of the *Anthus minimus* of Messrs. Vigors and Horsfield, and having pointed out the particulars in which it differs from the members of the genus *Anthus*, proposed to constitute it the type of a new genus, with the following appellation and characters:—

## CHTHONICOLA, nov. gen.

*Char. gen.*—*Rostrum* breve, a basi descendens, mandibulâ superiore ad apicem lævè dentatâ, in lateribus compressâ. *Tomia* introrsum curvatæ. *Alæ* concavæ, primario primo perbrevis, tertio, quarto, quinto et sexto longitudine æqualibus. *Tarsi* moderati. *Digiti* breves, posticus medio brevior. *Ungues* anteriores magis quam in "*Antho*" curvati.

*Gen. char.*—Bill short, gradually descending from the base; the upper mandible slightly notched at the tip, compressed laterally; tomia curving inwards; wings concave; the first primary very short, the third, fourth, fifth and sixth nearly equal and the longest; tail slightly concave, and all the feathers of an equal length; tarsi moderately long; toes short, the hinder toe somewhat longer than the middle one; front claws more curved than in the genus *Anthus*.

## DESCRIPTION OF A NEW SPECIES OF AMPHIOXUS FROM BORNEO.

BY J. E. GRAY, ESQ., F.R.S., ETC. ETC.

Capt. Sir Edward Belcher having most kindly sent to the British Museum the various species of reptiles, worms, &c. in spirit which had been collected during the voyage of H.M.S. Samarang, I hasten to lay before the Society the description of what appears to be a new species of Lancelet (*Branchiostoma*, Costa = *Amphioxus*, Yarrell), premising that I have sent a second specimen to Dr. Clarke, R.N., of Haslar, who has kindly promised to send me some anatomical details of it, which shall be communicated to the Society as soon as they arrive.

I may remark that the specimen from Borneo very much resembles in size the specimen which Mr. Couch obligingly sent to me from Cornwall, and, like it, is more silvery and considerably larger than numerous specimens I have received through the kindness of Dr. Kolliker from Naples. This difference in colour may arise from the Naples specimens having been placed in stronger spirits; but it gives the Cornish and the Borneon specimens much more the resemblance of Annelides, which generally have this metallic iridescent silvery hue.

The resemblance of the Borneon to the Cornish specimen is so striking, that it is very difficult to draw a distinction between them with neatness or brevity; yet they appear to my eye sufficiently different to induce me to regard them as distinct species, which the great geographical distance between their habitats renders probable.

*Amphioxus Belcheri.*—The Borneon Lancelet appears rather thicker and more convex on the sides than *Amph. lanceolatus*, and the convex ridge which occupies the place of the dorsal fin appears higher and more closely divided by internal transverse septa than in that species, and these septa appear more numerous. I have not been able to observe any beards on the margin of the mouth, which is thickened and rounded; but this may arise from the specimen not being in good condition, especially in this part where it has been injured by the spines of a *Spatangus* which was in the same bottle.